

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

- 1 1. (Presently Amended) A method for managing a data imaging service from a  
2 management terminal in a distributed computer system having a host computer  
3 system with at least one storage device connected to the computer system by  
4 driver software, the method comprising:
  - 5 (a) inserting an interface layer between the driver software and the storage  
6 device, the interface layer exporting a platform dependent API comprising  
7 a plurality of API methods that can be used to control and controlling data  
8 passing between the driver software and the storage device;
  - 9 (b) running, in the host computer system, management facade software that  
10 ~~converts the interface layer API to~~ receives calls to platform-independent  
11 ~~method calls~~ methods and generates at least one API method call to the  
12 interface layer in order to execute the platform-independent method calls;
  - 13 (c) running, in the host computer system, a federated bean that generates  
14 platform-independent method calls to the management facade to control  
15 the interface layer via the plurality of API methods; and
  - 16 (d) controlling the federated bean to designate master volumes, shadow  
17 volumes and bitmap volumes and to transfer data between specified  
18 master and shadow volumes.
- 1 2. (Original) The method of claim 1 wherein step (d) comprises controlling the  
2 federated bean with a command line interface.

- 1 3. (Original) The method of claim 1 wherein step (d) comprises controlling the  
2 federated bean with a graphical user interface.
- 1 4. (Original) The method of claim 1 wherein step (d) comprises:  
2 (d1) creating a volume set; and  
3 (d2) designating a master volume, a shadow volume and a bitmap volume as  
4 part of the volume set; and  
5 (d3) performing data imaging operations on the volume set.
- 1 5. (Original) The method of claim 4 wherein a plurality of volume sets are created  
2 and wherein the method further comprises:  
3 (e) creating a set group; and  
4 (f) adding selected volume sets to the set group; and  
5 (g) controlling the set group with a single command to perform data imaging  
6 operations on each set in the set group.
- 1 6. (Original) The method of claim 4 further comprising attaching an overflow volume  
2 to the volume set.
- 1 7. (Original) The method of claim 4 wherein the computer system has a first host  
2 with a volume set thereon and a second host and the method comprises  
3 exporting a shadow volume in the volume set from the first host.
- 1 8. (Original) The method of claim 7 further comprising importing the shadow volume  
2 exported by the first host into the second host.
- 1 9. (Presently Amended) Apparatus for managing a data imaging service from a  
2 management terminal in a distributed computer system having a host computer  
3 system with at least one storage device connected to the computer system by  
4 driver software, the apparatus comprising:

5 an interface layer located between the driver software and the storage  
6 device, the interface layer exporting a platform dependent API comprising a  
7 plurality of API methods that can be used to control and controlling data passing  
8 between the driver software and the storage device;

9 management facade software that runs in the host computer system and  
10 ~~converts the interface layer API to~~ receives calls to platform-independent method  
11 ~~calls~~ methods and generates at least one API method call to the interface layer in  
12 order to execute the platform-independent method calls;

13 a federated bean that runs in the host computer system and generates  
14 platform-independent method calls to the management facade to control the  
15 interface layer via the plurality of API methods; and

16 a presentation program that controls the federated bean to designate  
17 master volumes, shadow volumes and bitmap volumes and to transfer data  
18 between specified master and shadow volumes.

1 10. (Original) The apparatus of claim 9 wherein the presentation program comprises  
2 a command line interface.

1 11. (Original) The apparatus of claim 9 wherein the presentation program comprises  
2 a graphical user interface.

1 12. (Original) The apparatus of claim 9 wherein the presentation program comprises:  
2 program methods for creating a volume set; and  
3 a screen display for designating a master volume, a shadow volume and a  
4 bitmap volume as part of the volume set; and  
5 program methods for performing data imaging operations on the volume  
6 set.

1 13. (Original) The apparatus of claim 12 wherein a plurality of volume sets are  
2 created and wherein the apparatus further comprises:

3           program methods for creating a set group; and  
4           a screen display for adding selected volume sets to the set group; and  
5           program methods for controlling the set group with a single command to  
6           perform data imaging operations on each set in the set group.

1   14.   (Original) The apparatus of claim 12 further comprising program methods for  
2           attaching an overflow volume to the volume set.

1   15.   (Original) The apparatus of claim 12 wherein the computer system has a first  
2           host with a volume set thereon and a second host and the apparatus comprises  
3           means for exporting a shadow volume in the volume set from the first host.

1   16.   (Original) The apparatus of claim 15 further comprising means for importing the  
2           shadow volume exported by the first host into the second host.

1   17.   (Presently Amended) A computer program product for managing a data imaging  
2           service from a management terminal in a distributed computer system having a  
3           host computer system with at least one storage device connected to the  
4           computer system by driver software, the computer program product comprising a  
5           computer usable medium having computer readable program code thereon,  
6           including:

7           interface layer program code located between the driver software and the  
8           storage device, the interface layer code exporting a platform dependent API  
9           comprising a plurality of API methods that can be called to control ~~and controlling~~  
10          data passing between the driver software and the storage device;

11          management facade software that runs in the host computer system and  
12          ~~converts the interface layer API to~~ receives calls to platform-independent method  
13          calls methods and generates at least one API method call to the interface layer in  
14          order to execute the platform-independent method calls;

15 a federated bean that runs in the host computer system and generates  
16 platform-independent method calls to the management facade to control the  
17 interface layer via the plurality of API methods; and

18 a presentation program that controls the federated bean to designate  
19 master volumes, shadow volumes and bitmap volumes and to transfer data  
20 between specified master and shadow volumes.

1 18. (Original) The computer program product of claim 17 wherein the presentation  
2 program comprises a command line interface.

1 19. (Original) The computer program product of claim 17 wherein the presentation  
2 program comprises a graphical user interface.

1 20. (Presently Amended) A computer data signal embodied in a carrier wave for  
2 managing a data imaging service from a management terminal in a distributed  
3 computer system having a host computer system with at least one storage  
4 device connected to the computer system by driver software, the computer data  
5 signal comprising:

6 interface layer program code located between the driver software and the  
7 storage device, the interface layer code exporting a platform dependent API  
8 comprising a plurality of API methods that can be called to control and controlling  
9 data passing between the driver software and the storage device;

10 management facade software that runs in the host computer system and  
11 ~~converts the interface layer API to~~ receives calls to platform-independent method  
12 ~~calls~~ methods and generates at least one API method call to the interface layer in  
13 order to execute the platform-independent method calls;

14 a federated bean that runs in the host computer system and generates  
15 platform-independent method calls to the management facade to control the  
16 interface layer via the plurality of API methods; and

17                   a presentation program that controls the federated bean to designate  
18 master volumes, shadow volumes and bitmap volumes and to transfer data  
19 between specified master and shadow volumes.

### **Amendments to the Drawings**

The attached sheets of drawings includes changes to Figures 6-13. These sheets, which includes Figures 1-16C, replaces the original drawing sheets 1-18 including Figures 1-16C.

Attachment: replacement sheet(s)